

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A process for transmitting asynchronous data packets, comprising the steps of:

starting a packeting operation of asynchronous data in a packeting module;

receiving, in said packeting module, a message from a message composition module when the message composition module needs a data packet;

interrupting said packeting operation based on said message;

transmitting a packet of asynchronous data from the packeting module formed during said packeting operation prior to said interrupting step even if the packeting operation of the asynchronous data is not completed; and

repeating said steps of starting, receiving said message, interrupting, and transmitting thereby transmitting a plurality of data packets.

Claim 2 (Original): The process of Claim 1, further comprising the step of receiving said packets at said message composition module.

Claim 3 (Original): The process of Claim 2, wherein said step of receiving said packets is performed in a predefined order.

Claim 4 (Original): The process of Claim 2, further comprising the step of composing a message with said packets at said message composition module.

Claim 5 (Original): The process of Claim 4, further comprising the step of formatting said message into a formatted message.

Claim 6 (Original): The process of Claim 5, further comprising the step of transmitting said formatted message.

Claim 7 (Original): The process of Claim 1, wherein said interrupting step is triggered when said message is received from said message composition module.

Claim 8 (Original): The process of Claim 6, wherein a packeting time duration for said packeting operation is more than half of a total time duration for packeting said asynchronous data and for transmitting said formatted message.

Claim 9 (Previously Presented): The process of Claim 8, wherein said total time duration is less than 100 ms, said packeting time duration is approximately equal to said total time duration, and a time duration for transmitting said message is negligible compared to said packeting time duration.

Claim 10 (Original): The process of Claim 1, wherein a packeting time duration for said packeting operation is equal to a cycle time for a transmission line over which said packets are transmitted.

Claim 11 (Original): The process of Claim 6, wherein a packeting time duration for said packeting operation is more than a time duration for transmitting said message.

Claim 12 (Currently Amended): A process for transmitting a packet of asynchronous data, comprising the steps of:

packetizing, in a packetizing module, said asynchronous data into a packet during a packetizing time;

requesting, by a message composition module, said packet when said message composition module needs said packet;

stopping said packetizing;

composing a message comprising said packet; and

transmitting said message during a message transmitting time even if the packetizing is not completed,

wherein said step of requesting is performed so that said packetizing time is greater than said message transmitting time.

Claim 13 (Original): The process of Claim 12, wherein said step of transmitting said message is performed over a transmission line having a cycle time, and said step of requesting is performed so that said packetizing time is equal to said cycle time.

Claim 14 (Original): The process of Claim 12, wherein said stopping step is triggered by said requesting step.

Claim 15 (Original): The process of Claim 12, wherein said packetizing time is more than half of a total time for packetizing said asynchronous data and for transmitting said message.

Claim 16 (Previously Presented): The process of Claim 15, wherein said total time is less than 100 ms and said message transmitting time is so short compared to said packetizing time that said total time is approximately equal to said packetizing time.

Claim 17 (Previously Presented): The process of Claim 12, further comprising:
recovering, one after another, packets created in a predefined order in a message composition module.

Claim 18 (Previously Presented): The process of Claim 1, wherein the message composition module recovers the data packets created by a plurality of successive packeting modules one after the other in a predefined order.

Claim 19 (Previously Presented): The process of Claim 9, wherein said total time duration is less than 100 ms.

Claim 20 (Previously Presented): The process of Claim 1, wherein said message includes a number of data in said packet of asynchronous data equal to or less than 11, and said message includes one wrapping.

Claim 21 (New): The process of Claim 1, wherein said packeting operation includes sorting and enhancing data.

Claim 22 (New): The process of Claim 1, further comprising:
a step of requesting said data packet from said message composition module, and said step of transmitting said packet of asynchronous data from the packeting module is performed as soon as the message composition module requests said data packet.

Claim 23 (New): The process of Claim 1, wherein said step of interrupting said packeting operation is performed as soon as the packeting module receives the message from the message composition module, and further comprising a step of transmitting an incomplete data packet, being composed at a time of said interrupting, to the message composition module after said step of interrupting said incomplete packet, and further comprising a step of starting a next packeting operation composing a next data packet as soon as the incomplete packet is transmitted.

Claim 24 (New): The process of Claim 1, wherein the message composition module needs said data packet after the message composition module has transmitted a previous data packet and the message composition module is ready to start the packeting operation again.